	gr.1	gr.2	p
early reperfusion (%)	100	70	NS
time of CK peak (hours)	10.6 ± 3	11 ± 3	NS
CK peak (UI/l)	4307 ± 3471	2449 ± 2137	<0.05
viability (%)	38 ± 29	49 ± 26%	0.07
recovery (%)	15 ± 20	33 ± 29%	<0.05

Conclusions: Pts elected to PTCA have a greater likelihood of achieving early reperfusion. However, in spite of that, percent reduction of infarct size and the early recovery were significantly less than in pts undergoing thrombolysis. Furthermore, we observed a trend towards lesser residual viability. The delay of treatment onset is a critical factor which has to be carefully considered before choosing dPTCA. A greater reperfusion damage caused by abrupt reflow may also play a role.

1059 Therapeutic Approaches for Myocardial Ischemia

Monday, March 30, 1998, 3:00 p.m.–5:00 p.m.
Georgia World Congress Center, West Exhibit Hall Level
Presentation Hour: 4:00 p.m.–5:00 p.m.

MONDAY POSTER

1059-131 Beneficial Effects of Enhanced External Counterpulsation (EECP) may Not Be Mediated by Changes in Myocardial Perfusion

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EECP has been reported to decrease ischemic symptoms in patients with angina refractory to maximal medical therapy who are not candidates for revascularization. However, the mechanism of the beneficial effects of EECP are unclear. To evaluate the effect of EECP on myocardial perfusion, myocardial blood flow was measured using PET in 11 patients before and after 35 sessions of daily EECP. All 11 patients had angina refractory to medical therapy and had failed prior bypass surgery and/or coronary interventions. Patients were studied at rest and after dipyridamole, and myocardial perfusion was quantified with 13NH3 and a 2-compartment mathematical model. There were no changes in either hemodynamics nor in the area of ischemia as a result of EECP. Although there was a decrease in nitroglycerin use and enhanced exercise tolerance after EECP, myocardial blood flow at rest or after dipyridamole was not different in either ischemic or infarcted zones (I) or in non-ischemic areas (NI) (even though these territories were supplied by diseased coronary arteries as documented by their limited myocardial flow reserve in response to dipyridamole).

	Rest		Hyperemia	
	I	NI	I	NI
Pre-EECP	73 (19)	96 (17)	98 (46)	172 (74)
Post-EECP	74 (20)	86 (20)	105 (41)	165 (66)

Values are mean (SD) in ml/100 g/min

The results suggest there is no change in the region at risk nor in absolute myocardial perfusion either at rest or during hyperemia early after EECP therapy. Salutory responses to EECP therapy may therefore be independent of its effects on myocardial perfusion.

1059-132 Long-term Evolution of Severe Three-vessel Coronary Artery Disease Not Amenable to Revascularization

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Myocardial revascularization exerts favourable effects on prognosis and quality of life in patients (pts) with severe coronary artery disease (CAD). Aim of this study was to assess survival and quality of life in pts with diffuse CAD, not eligible for revascularization. From a retrospective analysis of 1100 pts undergoing diagnostic cardiac catheterization for angina pectoris, we selected 64 pts (5.8%–59 males, mean age 55.3 years, range 39–66) with diffuse CAD. None of the pts underwent any revascularization procedure, all were discharged on full medical therapy and followed-up for an average time of 101.3 months (range 36–184). For study purposes we correlated angina type, presence/absence of previous myocardial infarction (MI), ejection fraction (EF) and magnitude of left ventricular (LV) wall motion abnormalities (WMA) with event-free survival. At the end of monitoring, 60.2% of pts was alive, of whom 33.3% was asymptomatic, 31% had improved symptoms and 35.7% without changes in symptoms severity. Survival was 46% and 84.2% in pts with/without previous MI (p = 0.004). EF < 50% was present in 78.6% of asymptomatic pts, 92.3% of those with reduced symptoms and 66.7% of those with unchanged symptoms. 21.4% and 45.5% of surviving/not surviving pts had an EF < 50% (p = 0.026). Survival was 76.7% in pts with normal LV function or localized hypokinesia, 53.5% of those with diffuse hypokinesia and/or localized akinesia, and 42.9% of pts with LV aneurysm.

In conclusion, LV function is confirmed as the most important prognostic factor in patients with severe CAD. The high prevalence of pts with reduced/absent symptoms and the good survival rate might be due to currently improved therapeutic strategies and/or to an unintentional prevalence of pts with good global LV function included in our study.

1059-133 Results of Percutaneous Intervention for Unprotected Left Main Coronary Stenoses in Surgical and Non-surgical Candidates

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Both stenting (S) and directional atherectomy (DCA) have recently been proposed as reasonable alternatives to CABG for patients (pts) with unprotected left main stenoses (ULMS). To ascertain outcomes for pts at different CABG risk we queried a registry of 229 consecutively treated non acute MI pts treated at 25 centers since 1/94. Angios were core lab reviewed with 75% late follow up. 13% of inoperable pts had cancer or other life-limiting illness.

	Usual Risk	High Risk	Inoperable
n	119	79	31
Age (yrs)	62 ± 12	73 ± 14	69 ± 11
LVEF (%)	59 ± 10	45 ± 15	41 ± 18
Rest/progr angina (%)	28.6	45.8	67.7
Stent (%)	64.1	71.2	71.0
DCA (%)	26.9	16.7	3.2
In-hospital			
Cardiac death (%)	1.7	10.2	19.4
QMI (%)	0.8	1.8	6.7
Em CABG (%)	0.8	0.0	0.0
Restenosis (%)	23.3	26.9	50.0
12 month death (%)	7.4	20.9	57.1
12 month death, MI or CABG (%)	19.0	33.1	59.4

Clinical variables strongly influence outcome of percutaneous (perc) rx of ULMS. Perc rx may be reasonable in some settings, although the 5.7% of post-discharge death at 12 mos. for usual risk pts is worrisome.

1059-134 Effect of Standard Anti-Ischemic Therapy on Anginal Episodes in Patients With Syndrome X

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Since patients (pts) with syndrome X (SX, angina, normal coronary arteries, ischemia-like ECG changes on exercise testing) have a good long term prognosis, the only aim of treatment is the relief of symptoms. Yet, no previous study has directly compared the effect of standard anti-ischemic drugs on the frequency of anginal episodes in these pts. Thus, we performed a double-blind, controlled, crossover trial on the effects of conventional anti-ischemic therapy (beta-blockers, calcium-antagonists, nitrates) on anginal symptoms in 10 pts (57 ± 7 years, 4 men) with SX, who had >3 anginal episodes per week. After a 4-week run-in period, pts were treated with either amlodipine (AML, 10 mg), isosorbide 5-mononitrate (ISMN, 40 mg), or atenolol (ATEN, 100 mg), given once a day for a period of 4 weeks each, in a randomised cross-over order. Pts reported the occurrence of anginal episodes on an appropriately structured diary. Quality of life was assessed through a visual analogic scale (0 to 100 mm). A significant improvement or worsening was defined as a reduction or an increase of >25% of anginal episodes compared to run-in. The main results are summarized in the table.

	Run-in	ISMN	AML	ATEN
Anginal episodes	23 ± 18	24 ± 22	21 ± 22	15 ± 13*
Quality of life	22 ± 16	30 ± 27	51 ± 25*	59 ± 29*
Pts improved		4	5	6
Pts worsened		3	3	0

* P < 0.05 vs run-in

Thus, our data suggest that beta-blockers are, on average, more effective than other classic antiischemic drugs in controlling anginal episodes in SX pts.